

INVENTING MODERN PHOTOMONTAGE 1918: TRANSDISCIPLINARY PRECEDENTS IN PROTO MODERN PHOTOGRAPHY

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Abstract: Prototypes in modern photography were established throughout the visual arts worldwide in the first decades of the twentieth century. Growing experimentation and innovation beyond traditional art practices reflected a historic shift in new directions. Questioning the function and use of the camera, photographs, and a wide range of photographic processes, redefined the key role that photography played in modern art. Artists set precedents with a wide range of forms of proto modern photography.

Keywords: Photograms; Talbot; modern photomontage; Russian Avant-garde; modern photomontage in Germany; Gustavs Klucis.

Progressing from within the limitations of the medium, to inventing cross influences between various media. Traditional definitions were rewritten as the borders between mediums disappeared. *Modern photomontage* was one of many outgrowths of transdisciplinary approaches and methods that were invented by avant-gardes throughout Europe. Complex by nature and developed as a modern art form independently, it most often combined various mixtures of media. Modern photomontage like other forms of proto modern photography was solely defined by the intent of the artist across disciplines¹.

Photographers, artists, theorists, and critics contributed to the wide-ranging development of proto modern photography. Central to the establishment of interdisciplinary practices was advanced curricula established in some of the first modern schools of art, architecture and design. The Bauhaus in Germany and Vkhutemas (State Higher Art and Technical Studios) in Russia opened in late 1919–1920 backed by their national governments. Unprecedented programs and teaching were developed by the first generation of modernists.

However, early forms of proto modern photography were explored primarily by independent experiments and unconventional approaches by artists outside the classroom. Faculty members advanced innovations with photography first hand in their studios by individual practices and experiments. Various forms of photography were actively introduced into the classroom thanks to teaching by the avant-garde rather than centered in the new curricula of schools in both countries². At the second location after the Weimar Bauhaus, the first chemical laboratory for photography was built for the Master artists in Dessau in 1926. Four years before the German school closed in 1933, Walter Peterhans taught a separate course in photography. As modern art began to be targeted in both countries by the late 1920s and early 1930s, their unprecedented, international historical achievements were increasingly limited, ideologically contained and redirected, and virtually eliminated from the public sphere. Decreasingly supported as the two schools ended in closures by waves of political and sociological downturns that excluded modernism in any form.

¹ The term was first introduced in the lecture “Modern Photomontage in the Age of Proto Modern Photography” by the author for the International Conference “Formal Experiments and Innovations of Avant-Garde Art from the Perspective of Social Culture and Art Theory” organized and hosted by the Latvian National Museum of Art and the Goethe-Institut Riga, October 7-8, 2014.

² Limited aspects of the teaching history can be found in monographs of the avant-garde and modern art publications noting some of photography’s various roles. Historical references include Christina Lodder, *Russian Constructivism*, Yale University Press, New Haven and London, 1983; John E. Bowlt, *Russian Art of the Avant-Garde, Theory and Criticism*, Thames and Hudson, Inc., New York, 1988; Peter Hahn, *Experiment Bauhaus*, Das Bauhaus-Archiv, German edition, Berlin (West), 1988; Jeannine Fiedler, *Photography and the Bauhaus*, The MIT Press, Cambridge, Massachusetts, 1990.

In 1918–1919, the Stroganov School in Moscow opened first and second national workshops in art without programmed curricula to “sweep the past and lay the foundations of an original higher art teaching structure”. Expecting to organize a new basis drawn from the Renaissance model that actually lasted only the first year. Students and artists demanded a more “objective method of teaching” between multiple disciplines, opting for revolutionary directions that replaced academic classicism. Opening the doors to a formal program with experimental teaching methods and initiatives using past and a variety of emerging media. Vkhutemas was established by combining the two workshops for the reformation of artistic education in the “new style” to begin. Faculties in painting, sculpture, architecture, metalworking and woodworking, ceramics, textiles and graphic arts established experimental participation based in their own experimental practices. Interdisciplinary introductory courses led to specialized areas of study in color, graphic construction, volume, space, and psychoanalytical methods.³ Basically photography found in various media became regarded as another source of materials.

The emergence of proto modern photography in the era of new technological means and media that influenced the genesis of both schools, moved beyond rudimentary pedagogical instruction. Photographic experiments were explored especially with other disciplines in the studio. Nevertheless, proto modern innovations played a growing instrumental role in enlarging the teaching process. Modern photomontage became part of the new genre of multimedia. Representing part of a more progressive role in art with less definition than means. Exploration became central to inventive determination, helping to restructure new purpose in design, aesthetics and meaning. Existing primarily outside the formal classroom as a catalyst for an array of related printed media in various forms.

The first school devoted to modern photography by faculty, curriculum and practice opened in 1914. The Clarence H. White School in New York shared fundamental principles of art history with modern art and design. Russian-born, American cubist painter Max Weber, who studied with Matisse, knew Picasso, and was active with the New Society of American Artists in Paris, began lecturing for White’s classes at New York’s Columbia University in 1910. The same year Weber arranged the first American exhibition for painter Henri Rousseau at Alfred Stieglitz’s 291 Gallery. Stieglitz also selected Weber’s modern paintings for Younger American Painters, the first survey of modernism that exhibited his work with Arthur Dove, Marsden Hartley, John Marin, and Eduard (later Edward) Steichen among others. Weber designed the photography installation and poster for Stieglitz’s *International Exhibition of Pictorial Photography* in Buffalo, New York. The next year he exhibited his own work at the 291 Gallery⁴.

As a trained artist in various mediums including painting, prints, drawings, and his Cubist books, Weber contributed modernist perspectives for photography students as a founding faculty member of the Clarence White School. His close artistic relationships with friends also represented the first generation of modern photographers, such as Alvin Langdon Coburn, who he also met in 1910.⁵ Weber’s special lectures at the White School beginning in 1914 continued while Coburn, Paul Strand and other photographers were invited as guest lecturers. At the same time they began establish their formative and distinctive aesthetic styles in proto modern photography. Coburn in 1911 and Strand in 1916, while students such as Bernard Shea Horne experimented with related modern forms of expression by the camera (Fig. 1–3)⁶.

Strand specified his modern definition of “objective” photography in what he viewed as the distinct and separate boundaries of the medium. “Photography...finds its *raison d’être*, like all media, in a complete uniqueness of means. This is an absolute unqualified objectivity. Unlike the other arts, which are really anti-photographic, this objectivity is of the very essence of photography, its contributions and at the same time its limitation.... The full potential power of every medium is dependent upon the purity of its use”⁷. In contrast, Coburn mixed various photographic media and chemistries inside and outside of the darkroom. From black and white gelatin silver photographs, to platinum and gum bichromate printing, to photogravure with ink on paper and

³ Selim Khan-Magomedov, *Vkhutemas, Moscow 1920–1930*, Volume 1, Editions du Regard, Paris, 1990, 13. Vkhutemas is the Russian acronym for Высшие художественно-технические мастерские, Vysshie gosudarstvennye khudozhestvenno-tekhnicheskie masterskiye, State Higher Art and Technical Studios.

⁴ Percy North, Max Weber, *The Cubist Decade 1910–1920*, High Museum of Art, Atlanta, 1991, 22.

⁵ Coburn wrote to Gertrude Stein in Paris on April 30, 1913 “I first became interested in the work of the modern [Clarence White] school through my friend Max Weber”. Estate of Max Weber, Santa Fe, New Mexico.

⁶ Introductory research of early, proto modern forms of photography including the Clarence White School are found in the essay “The Artist and the Critic” along with the preface and catalog for the initial exhibition on the subject, *Proto Modern Photography*, Museum of New Mexico, Santa Fe, 1992. Exhibited at the International Museum of Photography at George Eastman House in Rochester, New York the following year. Request for the author to research, curate and write about the “new chapter” came after years of discussions with preeminent, photography art historian Beaumont Newhall, founder of the Photography Department at The Museum of Modern Art in New York. Research, exhibition and catalog funded by the National Endowment for the Arts.

⁷ [Paul Strand], “Photography”, *Camera Work*, 49–50, 1917, 3.

experimenting by mixing the processes. Proto modern photography existed in many forms and moved in various directions depending on the individual style, processes, methods, materials and mastery of the proto modernists.

Weber helped institute the establishment of the curriculum at the White School with art history and its universal principles related to modern practices, theory and design. His lectures at the School on aesthetics were written in the autumn of 1914. The series of talks delivered to the first generation of modern photography students was published in June 1916 as *Essays on Art*. “Whatever form of so-called modern art might yet be invented or evolved,” he wrote, “time, as always will decide whether its modernity or newness shall ever ripen with age and become part of tradition” (Fig. 4)⁸. Various forms of proto modern photography and art were underway at the time around the world. Pure approaches to the medium were mastered along with transdisciplinary advances in multimedia. Including modern photomontage invented through an ever-expanding range of artistic practices, innovations and an assortment of definitions based on the artist’s intent.

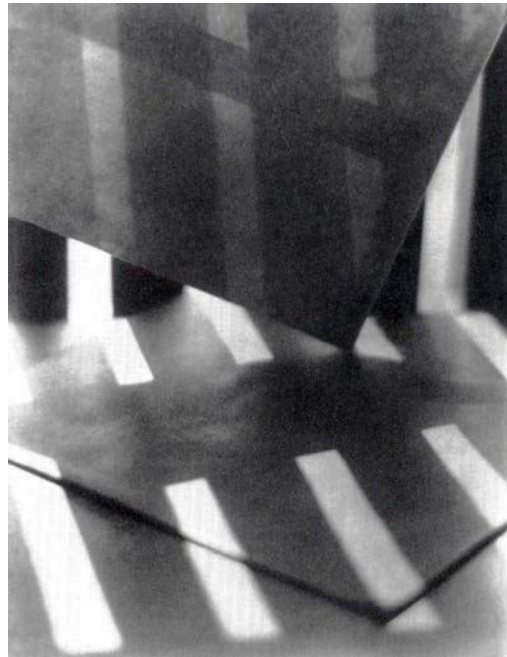


Fig. 3. Bernard Shea Horne, *untitled*, platinum photograph, platinum photograph, c1916–1917, Estate of Max Weber, Santa Fe, New Mexico.

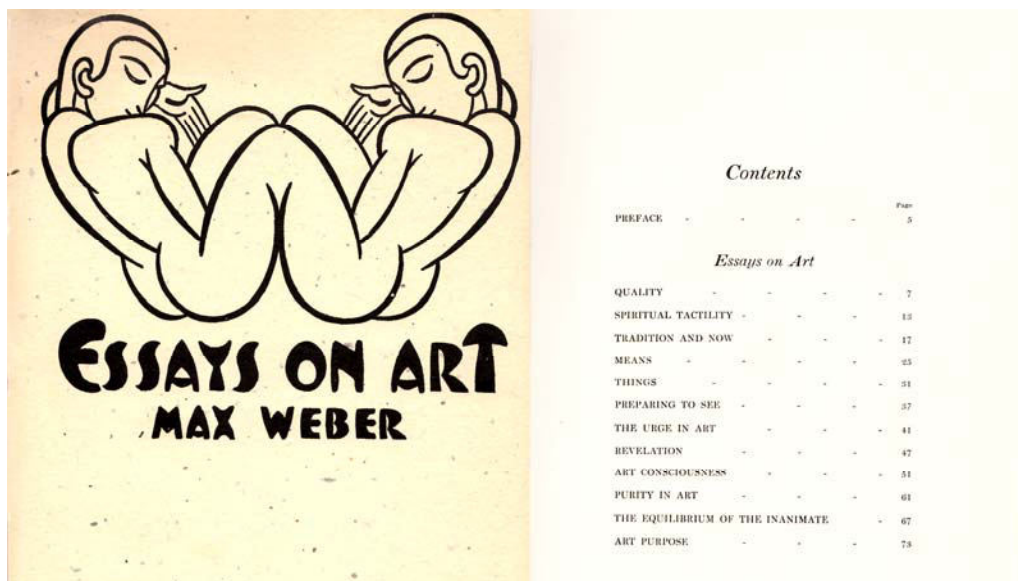


Fig. 4. Max Weber, *Essays on Art*, William Edwin Rudge, New York, 1916, cover and contents. Estate of Max Weber, Santa Fe, New Mexico.

⁸ Max Weber, *Essays on Art*, William Edwin Rudge, New York, 1916, 10. Estate of Max Weber, Santa Fe, New Mexico.

Other historical precedents provide related contexts to the future developments that led to the inventions of modern photomontage in 1918. Beginning with the first experimental methods leading to the inventions of photography during the 1830s. Including the first chemical prints made without a camera negative as well as related printmaking with ink on paper. The inventor of the modern technique of photography, William Henry Fox Talbot set precedents with paper prints, the negative and positive process of camera photographs and the first books of photographs *Pencil of Nature*, 1844–1846. Leading to a variety of related photographic processes in the late nineteenth and early twentieth centuries including various photomechanical prints made with ink on paper, using various forms of photography. Talbot established his invention of photography as a diverse artistic medium in many directions.

He first positioned items from nature such as leaves and objects by exposing them arranged on his light-sensitive papers. Creating what he termed “photogenic drawings” that were unique montages of light and dark shapes and silhouettes made by light. Hand-made light-sensitive papers were developed and fixed permanently by his chemical process. This led to placing light-sensitive papers inside the camera to create negative images made with the lens. Then contact printed to make positives, which became a primary invention of photography with chemical process that Talbot wrote about and presented to the English Royal Society on January 31, 1839⁹. The positive and negative process was central to photography practices for almost 150 years until digital technologies began to replace the basic chemical method, returning to ink on paper in the late twentieth century.

Alternatively the unique negative-less photographs, or photogenic drawings, were also printed as ink on paper with other media such as woodcut engravings. First produced on the cover of *The Mirror* on April 20, 1839 (Figure 5)¹⁰. Noted as a “Fac-simile of photogenic drawing” the woodcut engraving of ink on paper was made from the photogenic drawing by Talbot of leaves exposed on light sensitive paper without the camera. The woodcut by Botanist Dr. Golding Bird includes the essay by Talbot introducing “A Treatise on Photogenic Drawing”.

The ink-printed process stands as further technologies multiplied new forms of photography beyond the chemical process. Relatedly, mass printing technologies and mixtures of mediums found in the invention of modern photomontage beginning in 1918 revolutionized the avant-garde’s artistic role in the early twentieth century. Printed media in thousands of multiples becomes central to images made from the printing press with ink on paper. Advanced today with digital technologies and electronic media that offer new capabilities such as millions of colors never seen for the first-time.

By combining and placing objects on paper to create negative light images – reversals made from the silhouettes of shapes – Talbot’s “sun prints” became collages of light patterns. Natural light forms chemically printed after exposure to create one print. Not unlike combinations of photographically-combined images arranged together in historical forms of general photomontage, photogenic drawings set precedents that led to modern art forms with the emergent aesthetics of montage.

Other techniques and practices deeply rooted in the advances of nineteenth century photography provide further comparisons to basic photomontage. Photographers such as Oscar Rejlander and Henry Peach Robinson combined several negatives made by the camera to create *composite prints* as one photograph, chemically printed together in the 1850s. The combination prints by Gustav Le Gray who printed two negatives, one of landscape and the other exposed to the sky because of the limitations in light sensitivity in negatives manufactured at the time, printed the negatives together as a single landscape¹¹. Single combination prints made with several negatives along with Talbot’s photogenic drawings made without the camera, and related printed media with the photomechanical printing press, led to related developments in basic forms of photomontage in the nineteenth century.

For instance, Talbot’s negativeless photogenic drawings set precedents for modern photograms and filmmaking montages almost century later. Christian Schad invented the modern form of what is now termed the photogram, or negative-less photographs after designating them initially with the idiom “Schadographs”

⁹ William Henry Fox Talbot, “Some Account of the Art of Photogenic Drawing, or, the Process by which Natural Objects May Be Made to Delineate Themselves without the Aid of the Artist’s Pencil”, reprinted in Beaumont Newhall, ed., *Photography: Essays and Images*, The Museum of Modern Art, New York, 1980.

¹⁰ “Fac-simile of photogenic drawing” woodcut engraving by Botanist Dr. Golding Bird, cover of *The Mirror of Literature, of Amusement and Instruction* with the essay by Henry Fox Talbot, “A Treatise on Photogenic Drawing”, Volume XXXIII, Number 945, April 20, 1839, 243–244. The history is further documented in Nathan Lyons, Editor, *Image: Journal of Photography of the George Eastman House*, Volume 8, Number 2, June 1959, 7.

¹¹ Newhall, *The History of Photography*, ibid., 19–20 (Talbot), 74–76 (Rejlander, Robinson, Le Gray).

in 1918, the same year as the invention of modern photomontage. Followed by Man Ray, his Rayographs and abstract films, El Lissitzky and others created abstractions with light with an unlimited range of transparent forms made from negative and positive shadows. László Moholy-Nagy's prolific body of work in photograms were expanded their influence into related transdisciplinary works in thirteen mediums with kinetic sculpture, film, painting, and printmaking to modern photomontage and theatre and theory. Alvin Langdon Coburn's Vortographs made with mirrors attached to the camera produced abstract negatives and photographs that are interrelated to photograms and photomontage (Fig. 6-7)¹².



Fig. 5. "Fac-simile of photogenic drawing", woodcut engraving by Dr. Golding Bird from the photogenic drawing by William Henry Fox Talbot, cover for *The Mirror of Literature, Amusement and Instruction*, Volume XXXIII, Number 945, April 20, 1839.

¹² Newhall, *The History of Photography*, *ibid.*, 199.

Moholy-Nagy began collaborating with his wife Lucia (Schulz) Moholy to create his first photograms in 1922 by placing small objects on unexposed, black and white as well as warm toned, daylight chloride papers measuring 13 × 18 centimeters. “For our first efforts in the art of the photogram we chose daylight paper which allowed us to watch every phase of the design during the entire [exposure] process”, writes Lucia (Fig. 8). After moving the next year with Moholy-Nagy to teach in Weimar at the Bauhaus, she enrolled at the Akademie für Graphische Künste und Buchgewerbe in Leipzig to learn about photography and chemical process. At night they would experiment further with photograms¹³. The photograms were unique and made without camera-produced negatives. Made by placing various small objects, opaque and transparent, on light sensitive paper as well as moving objects during multiple exposures with various forms of light for decades to come. Moholy-Nagy actively used the camera in the following years. The artist was introduced to the photography process by photographer Erzsébet Landau in Budapest and most likely saw early cinema in Szeged before leaving Hungary for Vienna and Germany late in 1919.

The artist continued the lessons of light abstractions into his paintings, drawings, printmaking, film, and theatrical set designs using transparencies with innumerable geometric forms as well as color. When beginning the photograms the concept of a three-dimensional motion machine as abstract projector unfolded. Combining light with movement offered further related potentials. Eventually phases of the ‘Light Display’ machine were completed in collaboration with engineer Stefan Sebök over the next nine years. Experiments to project reflections of light forms enlarged in a dark room like cinema, the machine’s rotating movement as a rotating light sculpture was made with chromed and various metals, plexiglas, wood and a small electric motor (Fig. 9). The kinetic sculpture abstract light projector was exhibited at the Werkbund Exhibition in Paris in 1930. At the same time Moholy-Nagy published the technical details and production of the design with Sebök as “Lichtrequisit einer elektrischen Bühne” (Light Prop for an electric stage) in the periodical *Die Form* in Berlin¹⁴.

Continuing abstract light experiments from photograms into three dimensions with light projections, Moholy-Nagy filmed and edited details of the kinetic sculpture in a darkened room to create *Lichtspiel Schwarz-Weiss-Grau* (*Lightplay Black-White-Grey*) the same year. Sharing the first screening with Sybil Pietzsch whom he married two years later, she wrote: “The patterns created by moving discs and rotating cylinders, by the solid black of dark metal and the transparencies of luminous plastic sheets” she continued, “All I could do was see” (Fig. 10).¹⁵ The kinetic Light-Space Modulator was partially conceived as a film projector of light and black patterns made with continuous reflections from the various metal and plastic surfaces that make up the sculpture. Creating temporary moving abstract forms as enlarged photograms rotating around the walls and ceiling inside the darkened room, to make up as the nonrepresentational film *Light Space Schwarz-Weiss-Erau*.

The outgrowing relationships between photograms, modern photomontages, and photography directly influence the wide range of experiments in thirteen mediums by Moholy-Nagy. His transdisciplinary experiments remain to be thoroughly analyzed and documented. Especially as precedents and influences moving into the digital age with the multifaceted directions in contemporary art in the twenty-first century. The same year photogram experiments began in 1922 before teaching at the Bauhaus, the artist also pursued his first modern photomontage. He briefly termed compositions with pasted photographs as “photoplastics” distinguishing them from montage and collage as a “determinative function” in response to discussions with artists of the De Stijl movement and their Neo-Plasticism in painting style.¹⁶ The modern photomontage “Bankruptcy Vultures” refers to everyday life in Germany at the time with hyperinflation of the Deutschmark rendering the currency worthless. Fragments cut from Deutschmarks are included with photographic silhouettes of the artist that appear in positive and negative forms referring to the photography process and photograms (Fig. 11).

Schadographs, Rayographs, Vortographs, photograms, and modern photomontages advanced the practice of kaleidoscopic imagery through a wide variety of media. The transdisciplinary practices of the proto modernists advanced related photographic ideas by merging modern art forms between two-dimensional printed media, painting, drawing and printmaking to three-dimensional sculpture, designed stage sets with light, architecture and cinema. Broadening the dialogue through an emerging array of various forms of modern photography.

¹³ Lucia Moholy, *Marginalien Zu Moholy-Nagy, Moholy-Nagy Marginal Notes*, Scherpe Verlag, Krefeld, Germany, 1972, 61. Also see the recent catalog raisonné, edited by Renate Heyne, Floris M. Neusüss and Hattula Moholy-Nagy, *Moholy-Nagy, The Photograms*, Hatje Cantz Verlag, Ostfildern, Germany, 2009 for thorough documentation with definitive history.

¹⁴ László Moholy-Nagy, “Lichtrequisit einer elektrischen Bühne” (Light Prop for an electric stage), *Die Form*, Volume V, Berlin, 1930. The designation of “light prop” from the film later became the “Light-Space Modulator” dated from initial concept to construction 1922–1930.

¹⁵ Sybil Moholy-Nagy, *Moholy-Nagy, Experiment in Totality*, MIT Press, Cambridge, Massachusetts, 1950, 60.

¹⁶ Lucia Moholy, *Marginalien Zu Moholy-Nagy, Moholy-Nagy Marginal Notes*, *ibid.*, 70.

Modern filmmakers Sergei Eisenstein from Riga as Gustavs Klucis, and Dziga Vertov (David Abelevich Kaufman) from Bialystok as Max Weber, established their own forms of photomontage in Moscow establishing modern principles in cinematic montage and directly related aesthetic contributions. Directing major films as well as writing and publishing theory with their innovative filmmaking practices, Eisenstein pioneered modern montage methods in filmmaking with extensive theoretical textbooks. He formulates various systems of related montage styles especially with intellectual montage. “Montage is [dialectical] conflict” where new ideas emerge from the collision of the montage sequence in “synthesis”, where new emerging ideas are not innate in any of the images of the edited sequence. Vertov’s writings exist primarily in early manifestos of the 1920s. “The geometrical extract of movement” Vertov writes, “through an exciting succession of images is what’s required of montage. Kinochestvo is the art of organizing necessary movements of objects in space as a rhythmical artistic whole, in harmony with the properties of the material and the internal rhythm of each object”. Editing is implied in meaning in the single Russian word of montage¹⁷. Film theory in montage further expanded definitions of modern photomontage in two and three-dimensional forms across disciplines (Fig. 12–13).

The history of photography, intermixed with a wide array of media, processes and materials since its various inventions in the 1830s, was broadened further during the early, proto modern era at the beginning of the twentieth century. Like Fox Talbot’s photogenic drawings, it begins outside of the positive and negative chemical process of photography, expanded in a diversity of final forms of expression. Modern photomontage is not a single medium solely based on photographs printed from the chemical darkroom. Multimedia is inherent to the development and definition. It becomes an assembly of various forms of photographic-based materials depending on artistic approaches and practices. Assembled from a variety of media including printed imagery in ink on paper from the photomechanical printing press.

A prolonged published history of misappropriations concerning the basic forms of photomontage involves related methods and partial definitions. Considered “mutant media” that falls outside of conventional norms of chemically printed photographs made from negatives, critic A.D. Coleman identifies a wide range of related techniques and misappropriations in art and photography histories about the general term photomontage.¹⁸ Instead modern photomontage is an expansive ever-changing medium without borders that began in 1918. When the Avant-garde increased their innovative discourse of transdisciplinary practices and aesthetics with proto modern forms of photography. Modern photomontage is a hybrid of unlimited applications of media and technologies that further expands today’s digital advances from the late twentieth to early twenty-first century.

Modern photomontage is multimedia defined by artistic intent. Expanding photographic forms of expression by inventive aesthetic decisions and discourse. Artists independently explored new potentials by selecting, cutting, pasting and assembling various printed forms of photographs as a medium in its own right. Many did not begin as photographers. By combining found photographic imagery in a variety of printed forms. While they assimilated old with new media, such as printed photographs made on the printing press combined with drawing, painting, and collage. Setting precedents in modern photographic art with ink on paper to day that regained relevance in related and emerging forms of digital photography found throughout contemporary art globally. Modern photomontage contributed a key historical chapter inside and outside schools, curricula and the mainstream of modern art movements. The diversity of experiments appeared throughout cross disciplines, sources, media, and materials. Multiple photographic images with mixtures of media offer fewer limits than independent art forms.

Artists invented modern photomontage in part, and in reaction to, single hand-made art mediums learned from their traditional arts training. Many in response to the dissolution of the First World War and the cultures that caused it. The advent of hybrid art forms found new life through emerging modern art disciplines. Some inventions of modern photomontage were noted as anti-art as its automatic, machine-made character challenged traditional practices and various modern “isms” in style. The use of found photographs in various printed forms reacted against the tradition of hand made art in principle and spirit. At the same time aesthetic potentials based on machine-made images made by the camera expanded the lexicon of modernism without parallel.

¹⁷ Sergei Eisenstein, “Methods of Montage”, *Film Form, Essays in Film Theory*, Dennis Dobson, London, 1949/1951, reprinted by Harcourt Brace & Company, 1977, 38. Also see *Film Sense*, 1942 and *Notes as a Film Director*, 1959. Annette Michelson, Editor, Kevin O’Brien, Translator, *Kino-Eye, The Writings of Dziga Vertov*, University of California Press, Berkeley, 1984, 8.

¹⁸ A.D. Coleman, “Mutant Media, Photo/Montage/Collage”, *Depth of Field, Essays on Photography, Mass Media, and Lens Culture*, University of New Mexico Press, Albuquerque, 1998, 63–80.

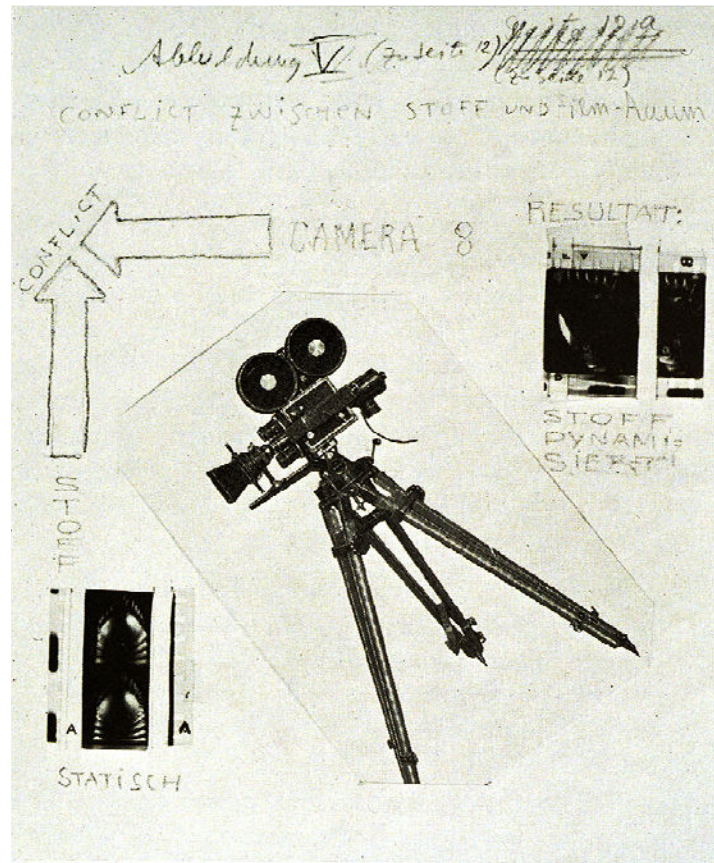


Fig. 12. Sergei Eisenstein, *Conflict between material and film space, A dialectic approach to film*, modern photomontage with pencil, 1929.



Fig. 13. Dziga Vertov, untitled, cinematic montage from *The Eleventh Year*, VUFKU (All-Ukrainian Photo-Cinema administration), gelatin silver photograph, 1928, Collection of Russian State Archive of Literature and Art (RGALI), Moscow.

The intention of the artist defines modern photomontage in practice and theory. Transdisciplinary and multimedia in nature, the avant-garde reinvented and wrote about the difference between other past forms of artistic expression including basic photomontage. As nineteenth century photogenic drawings evolved into the photogram through modern artistic intentions in the early twentieth century, various combinations of photographs, mixed processes, materials, and media, distinguished inventions of modern photomontage. The first year of modern photomontage in the summer of 1918 saw a number of approaches from eastern to central Europe.

Latvian Gustavs Klucis defined modern photomontage by expanding photography from modern styles with experimental mixtures of other art mediums. He advanced ideas by mastering traditional skills then breaking from the past. His early personal history is filled with examples as he assimilates modern values to build upon his own vision that is distinguished in mastering modern photomontage within the emerging avant-garde. Beginning with the failure of the 1905 Revolution in the Baltic region as he entered avant-garde history that continued to unfold in Moscow in 1917. "Through complex experiments, searching for new means of expression, from Cubism, Futurism, Suprematism and Constructivism, to politically saturated party thematics" he later wrote. "The path was like that: extremely complicated, sometimes contradictory, and beset by all possible kinds of mistakes". He continued: "I was already convinced that the revolution demanded new forms of art, ones that had never before existed. I set myself a singular task: to exhaust, through active work, all current directions and 'isms', and thus to be released from the burden of the past, from the old school, and to find new forms for the present".¹⁹

In July 1918 the Latvian – schooled artist started combining found and selected photographs with painting and drawing. After arriving on a train to Moscow in March as World War I ended, he was assigned as a soldier to create a new work in response to a further uprising. Art historian Iveta Derkusova documents the history: "During the Fifth All-Russia Congress of Soviets of Workers' Peasants', Soldiers' and Red Army Deputies (4-10 July) a revolt by the Left SR's (Socialist Revolutionaries) breaks out. As a Latvian Red Rifleman, Klucis also participates in suppression of the Left SRs uprising. After the Congress resumes, commandant of the Kremlin, Pavel Malkow commissions Klucis to create a panel for the facade of the Bolshoi Theatre". Malkow commissioned the work, the first modern photomontage created by Gustavs Klucis on July 6–7, 1918.²⁰

Attack, Latvian Riflemen (Attack. A Strike at the Counter-Revolution), Design for a panel at the Fifth All-Russian Congress of Soviets in Moscow is the first modern photomontage with artistic intent. The transdisciplinary work blends cut and pasted photographic fragments within Cubist and Futurist elements created by drawing in pencil and ink, and painting with gouache (Fig. 14). The modernist mastered a wide array of mediums from the studio and darkroom to color photolithography in the following next two decades during the proto modern era which ended by World War II. Handwritten below at left below the image is "Initial phase of the photomontage approach. The whole work, although it has a thematic idea, has been turned into an abstraction. Photography is a means..."²¹ The importance of Klucis's transdisciplinary innovations with photography until the late 1930s lies in the fact that thematic ideas, especially prominent throughout his oeuvre, are secondary to his modern artistic contributions. Modern photomontage was a transdisciplinary process of change and artistic transformation from the past to the present, an unlimited medium for visual ideas that transcended allegory or ideology, which serves as vehicles with his innovations.

Klucis defined modern photomontage with works in various mediums and influences from his earliest Cubist and Suprematist drawings and paintings. Subsequently multiplying photographic experiments from the studio. Later making photographs with his first Kodak camera and learning to print black and white photographs in the chemical darkroom. Classically trained at the Riga City School of Art from 1913–1915, and the Imperial Society's School of Drawing in Petrograd before and after the February Revolution in 1917, he added photography in many forms to the mastery of classical art skills. For the first time the following year, the artist draws, paints, and exhibits with the Moscow Avant-garde in art and theatre.²²

¹⁹ Клуцис Густав Густавович (Klucis Gustav Gustavovich), Советские артисты, художники и художники-графики. Т. 1, Живописцы и графики (*Soviet Artists, Painters and Graphic Artists, Volume 1*), М., ИЗОГИЗ (M., IZOGIZ), 1937, 116-117.

²⁰ Iveta Derkusova, Gustavs Klucis, Latvijas Nacionālā Mākslas Muzeja Kolekcijas Zinātniskais Katalogs, *Gustavs Klucis, Complete Catalogue of Works in the Latvian National Museum of Art*, Volume I, Riga, 2014, 384 and Volume II, 72.

²¹ Iveta Derkusova, *Gustavs Klucis, Complete Catalogue of Works*, ibid., Volume II, 72.

²² Iveta Derkusova, *Gustavs Klucis, Kāda Eksperimenta Anatamija, Gustavs Klucis, Anatomy of an Experiment*, Riga: Latvian National Museum of Art, 2014, 179-182.

After the first modern photomontage “Attack” with painting and drawing Klucis introduces an extensive project in a series. Using painting, drawing and photography with a variety of modern photomontage variations in media and materials under the title *Dynamic City* in 1919–1920. Including drawing from pencil to ink, gouache, oil, adding further cut images from chemically printed photographs, and elements of paper collage. The first variant combines pieces of photographs with collage, gouache, and pencil with aluminum foil on paper (Figure 15, top left). The hand written inscription in pencil below another variant that combines photography with pencil on paper notes: “Here the photograph is used as a material that has texture and can compete among other kinds textures (gloss, matt, grainy, transparent, enameled, paper, etc.). The work was created in 1919, during an analytical period, and the example shows how an essentially abstract construction becomes perceivable as a concrete edifice because of the photographs of workers and buildings montaged into it”²³.

Variants include various reversals of elements in part from flipping the negative when making the photograph to cut and further printing other negatives to make prints (see glass plate negative with ink, Figure 15 top right). Adding photographic elements and other media as well as combining materials in the studio. The oil painting with concrete on wood of the same title with reversed geometric elements was exhibited at the Moscow UNOVIS exhibition in 1921 (Fig. 15, lower right)²⁴. Klucis was one of the most prolific masters of the transdisciplinary medium of modern photomontage, eventually expanding large and multiply printed versions with ink on paper. Further adding elements with photolithography and photomechanical methods from the printing press that expanded modern photography with color not yet available in chemical technologies.

Abstraction, modern photography and color with the mastery of fine art printmaking remained prominent features in the precedents set by Gustavs Klucis. Establishing his transdisciplinary paradigm as he taught advanced color theory at the Vkhutemas School in Moscow. Decades before color processes were chemically formulated in film and photography before his untimely death in 1938²⁵. His fine art of color photolithography with ink on paper created by rephotographing pasted photographs in modern photomontage, moved far beyond small illustrations found on the pages of avant-garde journals.

Life size prints, often printed as posters, replaced the one-of-a-kind original works of art in modern photomontage with large numbered editions. “From previously existing types of art I make use of their technical, formal and compositional achievements”, he observed. “The line of my further development was in the line of development of agitational and mass art...transforming [mechanically printed works of art of] the poster, book, the illustration, the postcard...among the masses”. He continued by combining experiments with two and three-dimensional art forms. Including his last, architecturally scaled constructions and photographic installations that were constructed in public spaces. Further visual innovations restrained by mandated despotic political idioms such as socialist realism. “I am now faced with new challenges: to reflect in my art the will, direction, ideals and heroism of the progressing masses, and to express profound political content through highly artistic form, and to master completely the method of socialist realism”²⁶.

Using photographs and ready-made from the printed page, his transdisciplinary approaches included advances in color, photolithography and collaborations with his wife, artist Valentina Kulagina. Creating one of the largest oeuvres of photography with color that he advanced using photolithography and photomechanical technologies with the modern printing press. Especially combining numerous mediums and art disciplines into various forms of modern photomontage (Fig. 16). Experimenting from the studio by adding chemically printed photographs made by staging subjects including self-portraits with the Kodak camera. Painting with ink and developer on glass plate negatives, making positive and negative combination prints of photographs chemically that are related to photomontage, advancing modern forms with photography combined with other printmaking media. During the artist’s final years photographic installations on unprecedented architectural scale were created with teams of artists in public parks and on buildings²⁷. While he used ideological themes as the newly formed Soviet Union continued to unfold in stalinist

²³ Iveta Derkusova, Gustavs Klucis, Latvijas Nacionālā Mākslas Muzelja Kolekcijas Zinātniskais Katalogs, *ibid.*, Volume II, 73.

²⁴ *Russian Avant-Garde Art, The George Costakis Collection*, Harry N. Abrams, Inc. New York, 1981, 207. UNOVIS is the Russian acronym for Utverditeli Novovo Iskusstva, The Champions of the New Art, a group and Council founded by Kazimir Malevich at the Vitebsk School of Art including Lissitzky and others in 1919.

²⁵ The great purge of Latvian intellectuals including Gustavs Klucis by Stalin in 1938 effectively helped end the proto modern era of photography inside the Soviet Union.

²⁶ Клуцис, Klucis, Советские артисты, художники и художники-графики, *Soviet Artists, Painters and Graphic Artists*, Volume 1, 1937, *ibid.*, 117–118.

²⁷ For further reference to darkroom experiments see “Gustavs Klucis and the avant-garde: Proto modernism to photographic ideas for the 21st century” by the author, I. Derkusova, Editor, *Gustavs Klucis, Kāda Eksperimenta Anatamija (Anatomy of an Experiment)*, *ibid.* Also see “Monumental Propaganda in the Urban Environment, 1932–1935”, Derkusova, *Gustavs Klucis*, Latvijas Nacionālā Mākslas Muzelja Kolekcijas Zinātniskais Katalogs, Volume II, *ibid.*, catalog numbers 362–394.

terms in the story-telling allegory exemplified by Oscar Rejlander and H.P. Robinson grounded in late nineteenth century narrative traditions of the history of photography, his prolific transdisciplinary forms of modern photomontage contributed unique dimensions to the aesthetics of modern art and culture historically.

The inventions of modern photomontage became an unprecedented fine art form in their own right subsequently with modern movements from Russian Constructivism and Suprematism to German Dadaism and French Surrealism. Klucis and Kulagina developed their own variations with other avant-gardists who experimented independently as Kazimir Malevich, Lyubov Popova, Stenberg brothers, Naum Gabo, Antoine Pevsner, Alexander Rodchenko, Varvara Stepanova and others. His evolution from Cubism and Suprematism in drawing, prints and painting as well as his own photography with Kulagina flourished into the art of photolithographic printmaking with color (Figure 16).

While a great part of the history of the Russian Avant-garde began in the provinces and bordering countries, artists began to move into the historic transition of larger metropolitan centers after World War I. Trained in art schools and in some cases, working in photography and newly established cinematic studios to develop related skills. Traditional art mediums combined with emerging modern technologies and new media expanded the definition of conventional photography. Proto modern approaches in photography included in exhibitions and productions on the printed page widened the potentials of mass media at the time.

In Germany, the War created further responses. Artists Raoul Hausmann discovered with Hannah Höch an independent definition of modern photomontage based on multidisciplinary principles. They discovered their concept months after Klucis created "Attack" in Moscow. After seeing a late nineteenth century photomontage of a military memorial placard found with pasted photographic portraits of soldiers during their August 1918 summer trip to the Baltic Sea. Discovering the idea they experimented after returning to Berlin by crafting early works with cut and pasted photographs found and selected from the printed pages of newspapers and magazines. "I began to make paintings with cut-outs of colored paper, newspaper, and posters", Hausmann wrote, "But it was on the occasion of a visit to the Baltic seacoast, on the island of Usedom, in the little village of Heidebrink, that I conceived the idea of photomontage.... This was a stroke of lightening, one could – I saw instantly – make *paintings* entirely composed of cut-out photographs. On returning to Berlin in September I began to realize this new vision by using photos from magazines and the movies... in general agreement with George Grosz, John Heartfield, Johannes Baader, and Hanna Höch, we decided to call these works *photomontages*. This term translated our aversion to playing artists, and, considering ourselves as engineers...we claimed to construct, to *mount* our works."²⁸ Creating first works from and with the photomechanical printing press rather than traditional paintings or drawings by the hand. As Dadaists they established modern photomontage with intent as "anti-art" outside of the coexisting styles of Cubism, Futurism and Expressionism. "We called this process photomontage", writes Hausmann, "because it embodied our refusal to play the part of the artist. We regarded ourselves as engineers, our work as construction: we *assembled* (in French: *monter*) our work, like a fitter.... which introduced the simultaneous juxtaposition of different points of view and angles of perspective, as in a kind of motionless moving pictures" (Fig. 17)²⁹.

Höch distinguished the difference between the discovery with Hausmann from the basic forms of photomontage historically and their subsequent modern practice: "the aesthetic purpose, if any, of this very primitive kind of photomontage was to idealize reality, whereas the Dada photomonteur set out to give to something entirely unreal all the appearances of something real that had actually been photographed.... Yes, our whole purpose was to integrate objects from the world of machines and industry into the world of art". She continues, "this by imposing, on something which could only be produced by hand, the appearances of something that could only be produced by a machine [camera]; in an imaginative composition", defining the modern intent of their invention, "we used to bring together elements borrowed from books, newspapers, posters, or leaflets, in an arrangement that no machine could yet compose".³⁰ Trained in classical art schools like Klucis, Höch and Hausmann attained skills within traditional art forms but not photography. Self-taught they began to select, cut out, assemble and paste already printed photographs by other photographers from the printed pages of ink on paper. New potentials in their conception extended the artist's studio to the printing press along with appropriating photographs by others. Cutting and pasting compositions from magazine,

²⁸ Raoul Hausmann, "New Painting and Photomontage" in Lucy Lippard, Editor, *Dadas on Art*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, 60, originally "Peinture nouvelle et photomontage" *Courier Dada*, Terrain Vague, Paris, 1958. Also see research from the Höch Archive, Ralf Burmeister, "Der Dada-Code, Hannah Höchs bildnerische Rhetoric des Grotesken", *Hannah Höch, Aller Anfang ist DADA!* Berlinische Galerie, Landesmuseum für Moderne Kunst, Fotografie und Architektur, 2007, 10.

²⁹ Raoul Hausmann, "Photomontage" in Hans Richter, *Dada, Art and Anti-Art*, Harry N. Abrams, New York, 1965, 118.

³⁰ Edouard Roditi, "Interview with Hannah Höch", *Arts*, New York, December 1959 reprinted in Lippard, *Dadas on Art*, *ibid.*, 73.

newspaper and book pages, modern photomontage became a transdisciplinary art, assembled from a wide variety of sources, rather than making their own photographs with the camera or chemically printing photographs.

While their originals imitated hand-made art, they were included in exhibitions to mock and satirize hand-made modern art forms with found photographs. The Dadaists criticized German politics, military and middle class society. With the failure of World War I ending in November 1918, their ready-made art made up of photomechanical fragments in compositions of disarray with no sense of design expressed post-war culture. “Hausmann and I were trying to suggest, with elements borrowed from the world of machines, a new and sometimes terrifying dream world”. She and Hausmann would continue to see and correspond with László and Lucia Moholy-Nagy in coming years at the Bauhaus as well as all of them seeing Lissitzky and others in their Berlin studios³¹.

After their discovery of the primitive military memorial photomontage in the Baltic Sea, Hausmann later added pasted photographs to his manifesto “synthetic cinema of the painting” in reaction to Cubism, Futurism and Expressionism written earlier in April. By 1919, he and Höch composed modern photomontages by intent with a myriad of photographic fragments cut from everyday news and advertising pages. Höch’s “Cut with the kitchen knife Dada through the last Weimar beer-belly cultural epoch in Germany” is a satirical panorama of German post-war culture that includes male political figures to Dadaists, women, sports figures, and animals³². The oversized modern photomontage (114×90cm, 45×35 inches) was critical of bourgeoisie values including traditional hand-made art (Figures 17–18). Inventions of modern photomontage in succeeding years continued as self-proclaimed anti-art against existing culture, modern art movements or styles.



Fig. 17. Raoul Hausmann, *Synthetisches Cino der Malerei*, *Synthetic Cinema of Painting*, modern photomontage, 1918, Collection of Berlinische Galerie, Berlin.

³¹ Lippard, *Dadas on Art*, ibid., 76.

³² Maud Lavin, *Cut With the Kitchen Knife: The Weimar Photomontages of Hannah Höch*, Yale University Press, New Haven, 1993, 17–20.

Modern photomontage in Germany is an art of edges without symmetrical design. Dadaists trained in art schools assembled cut outs with unidentified photographs and typographical letters from printed pages of magazines from the United States to Germany. Pasting letters from languages together into nonsensical typographical compositions directly related to Dada sound poetry. Abstract poems were related artistic forms that bridged literary phonetic sounds, created from syllables and individual letters in human speech, into meaningless verses without words. Sources include medieval folk-poetry³³. Dada's resistance to using any single language in sound poetry or modern photomontage further acted in the aftermath of destruction of the World War that was derived from the competing national identities that led to it.

Visual equivalents to sound poetry in modern photomontage and literary media were used to reject logic, reason, and established aesthetics. Emphasizing nonsense, chance, and the irrational in reaction and resistance to the First World War, which was advocated by middle class values. The modern photomontage by Dadaists stood in direct contrast, unrelated to that invented further east in European culture, which was deeply rooted in Byzantine culture, color, and design.

John Heartfield wrote that he and George Grosz began by sending pasted collages glued together on cardboard to soldiers on the World War front in 1916. Including labels for liquor and dog food, advertisements of trusses, pages from fraternity songbooks, postcards and photos "arbitrarily cut out and absurdly joined together" as a "political provocation" in "order to say in pictures what would have been censored in words". Their primitive collages were later "developed into a conscious technique" of modern photomontage. In 1919 the artists began publishing examples printed for the masses in German avant-garde journals as *Jedermann sein eigener Fussball: Illustrierte Halbmonatsschrift* (*Everyman His own Football: Illustrated semi-monthly*) as well as Dadaist journals (Fig. 19). The satirical, tabloid designed magazine published by Malik Verlag was owned by brother Wieland Herzfelde. The police confiscated the single issue on February 15, 1919, which included two modern photomontages by John Heartfield on the cover and six drawings by George Grosz³⁴. Three issues of *Der Dada* the main avant-garde periodical for the Berlin group were published in 1919–1920. Edited by Hausmann in collaboration with Grosz and Heartfield, their early experiments in nonlinear typography with found photomechanically printed photographs helped distinguish early examples of modern photomontage by intent. The cover of the final issue credits Heartfield with the abbreviation of "mont." from "monteurdada" in his preference along with "engineer" and "mechanic" over artist. Referring to the character of machine made imagery from the camera as well as photographs cut from the pages made by the printing press. On page 2 Grosz further satirizes middle class German society in the photomontage "'Daum' marries her pedantic automaton 'George'", mentioning in red print below that "John Heartfield is very glad of it", while further recognizing Heartfield as the monteur the same year in "The Convict". Combining Grosz's painted face with photographic fragments pasted into the cell window with additional parts of a mechanical heart and material folds pasted into the uniform (Fig. 20–21). Sharing the reality and references that both artists resisted war efforts and were sent briefly to asylums.

Modernists often created original pasted modern photomontages as a technical means to other ends. Original compositions often merged drawing and painting elements to be rephotographed, then printed on the mechanical printing press. Rephotographing the raw edges of torn and cut printed photographs with multiple surfaces by different combined media created one homogenized paper surface. Further reprinted by the photomechanical printing press in large numbers to reach the masses through avant-garde journals to life-sized photolithographic prints and posters. The printing press and ink on paper became an effective means to mass-produce art beyond exhibition walls. Setting precedents today for the widespread digital forms of photography from prints of ink on paper to and other surfaces to electronic screens.

Modern photomontage was one of the first transdisciplinary mediums in function and purpose. Artist's worked with countless methods of appropriation. Proto modernists often selected, cut and assembled photographs made by others. Most often from the printed page but with chemically printed black and white photographs as well, as both methods were used and combined. There is no single form of photography or process designated for modern photomontage. Intentional originality advanced in modern terms used mixtures of photographic imagery in any form through additional technologies and wide arrays of materials and surfaces. Mass-produced media allowed additions with color inks and design from photolithography to photo-offset and letterpress printing. Appropriations in the late twentieth century resurface with more advances of printed mixtures of media under the rubric of postmodernism. As an independent and transdisciplinary art form, modern photomontage grew through a

³³ Hans Richter, "From Abstract Poetry to Optophonetics" in *Dada, Art and Anti-Art*, *ibid.*, 118–119.

³⁴ Wieland Herzfelde, *John Heartfield, Leben und Werk (Life and Work)*, Verlag der Kunst, Leipzig, 1962 reprinted in Lucy Lippard, Editor, *Dadas on Art*, New Jersey: Prentice Hall, Inc., 92.

growing diversity of printing technologies. Continuing through emerging, computer electronic forms and technologies that provide further unlimited potentials in digital photographic-based imagery today.

Further historic collaborations between the avant-garde thrived in Russia after WWI. Aleksandr Rodchenko and Varvara Stepanova received their education and art practice east in the Art School of Kazan before moving to Moscow. Teacher and painter Nikolai Fechin encouraged experiments and discovery through assortments of hand-made art mediums. Fechin's mastery of the human figure with his expressive use of drawing, painting and color provided a model of classic discipline in the exploration for new paths of modern expression.³⁵ Rodchenko and Stepanova studied and synthesized various drawing and painting mediums from graphite, charcoal and ink, to gouache, watercolor and oil. Inserting geometric forms as well as using tools as the hand compass and architectural drawing devices from triangles to straightedges in their mechanically produced compositions and designs. By 1919 in Moscow the wide variety of mechanically printed media became a natural partner to expand their geometric and machine made vocabulary (Figure 22). Including found images from the optical camera and selected pages produced on the printing press. Rodchenko and Stepanova began to combine elements of found photographic materials selected and cutout from postcards, magazines and newspapers. Adding photomechanical prints of ink to color paper elements and wallpapers (Fig. 23) that expanded a wide array of experiments with photography.



Fig. 22. Unknown photographer, *Anniversary October Revolution* [Red Square], gelatin silver photograph, 1919, Collection of Sergei Burasovsky, Moscow.

Their advances in modern photomontage continued for four years before acquiring their first camera in December 1923. Adding further elements by processing negatives and chemically printing photographs the following year combined with various media and materials. The camera was used initially to stage portraits and assemble still lifes to photograph with selected objects in the studio.³⁶ Multiplying the possibilities in content by adding further subjects made individually. Rodchenko and Stepanova enlarged their modern lexicon by combining new self-made chemically printed photographs with found photomechanical photographs of ink on paper. At the same time Rodchenko created and combined cinematic montages and

³⁵ For a comprehensive history see Galina Tuluzakova, *Фешин, Fechin, Золотой Век, Санкт-Петербург*, St. Petersburg, 2007, Russian edition, and *Nicolai Fechin, The Art and Life*, Fechin Art Reproductions, Taos, New Mexico, 2012. Fechin left Kazan for the United States in the early 1920s and later established his studio and built his home in Czarist style, today a museum in Taos.

³⁶ See "Rodchenko's Diverse Photographic Modernism: 'Changing the angle of observation from techniques to art'", S. Yates, editor, *Alexander Rodchenko: Modern Photography, Photomontage, and Film*, Abangoardiako argazkigintzea, fotomontaketea eta zinemagintzea (Basque), *Fotografia de vanguardia, fotomontaje y cine* (Spanish), trilingual edition, BBK Fundación, Bilbao, 2003. Also Jaroslav Andel, "Cinema as a Model: Rodchenko and Vertov", Alexander Lavrentiev, "Alexander Rodchenko: The New Vision in Action", and Varvara Rodchenko and Alexander Lavrentiev, "Photographic Chronology".

graphics inside the Kino-Glaz (cinema-eye) and Kino-Pravda (cinema-truth) films and series with Dziga Vertov. As well as further integrating language symbols and forms into modern photomontages designed with writing and texts by Vladimir Mayakovsky.

The announcement of the central State shopping mall of stores at GUM (Государственный универсальный магазин, State universal store) combines Cyrillic typology with Constructivist forms. Placing the neoclassical Italian trade center commissioned by Catherine II in the early nineteenth century into modern art and literary contexts emerging in the next century (Fig. 24). As the growing metropolitan city and mass productions from the factory provided new opportunities and subjects, Stepanova and Rodchenko helped establish the Constructivist movement in philosophy and practice with the Avant-Garde in Moscow. Transforming and mixing traditional genre such as portraiture, landscape and still life in their artistic production to invent new transdisciplinary approaches with media. Proto modern forms of photography such as further variations of modern photomontage evolved in the currents of progressive art movements such as Russian Constructivism and Suprematism as well as outgrowths from European Futurism and Cubism.

Attention to iconographic traditions rooted in Byzantine culture further expanded modernist practice in countries east in Europe that embraced new facets of style and content with form, color, abstraction, and language. Adding to the growing complexity of modern photomontage. Modernists knowingly developed their ideas with centuries-old traditions rooted in Byzantine icon painting, symbology and linguistic typology. Expanding the inherent geometric sensibility and fragmentation of multiple perspectives with primary color. As well as the dedicated use of typographical elements from the Cyrillic Russian language, which originated in ancient Greece through orthodox religion (Fig. 25)³⁷. Language in Byzantine Art added critical visual elements and prolific typological relationships in the avant-garde's inventive modernism collaborations included modern photomontage made as original art works to mass printings in avant-garde journals, books and literature.

By further example Rodchenko's eight photomontages correspond independently to the excerpts of prose written by poet Vladimir Mayakovsky published in *Pro Eto* (Fig. 26). Mayakovsky's use of everyday vernacular language narrates the persona and relationship with Lily Brik while Rodchenko's cut and assembled photographic fragments serve as powerful visual counterparts to the free verse. Together revealing true passions and multiple dimensions found in the realities of everyday modern life unfolding during the 1920s. Human elements created throughout Rodchenko's wide range of figurative and architectural constructions become a visual centerpiece that is interconnected with the free associative verse in many ways. The stark realism and documentary style of *Pro Eto* combines poetry with eight modern photomontages that represent the complexity of rapid change in society. Rodchenko created twenty-one modern photomontages; eight were published in the first edition of 3000 copies of *Pro Eto* on 5 June 1923³⁸. Selecting and arranging kaleidoscopic fragments, the artist expresses multiplicity in complex and counter balancing metaphors, which performs between pictures and words. The collaboration with Mayakovsky blends visual and written meaning on numerous levels.

Rodchenko further engaged his constructions with objects and photographs inside the studio. *Mena Vsekh* (*Change of Everybody*) is a "three-dimensional photomontage for book cover of Constructivist poets"³⁹ that began as a staged still life (Fig. 27). Photographs made in the studio were cut and assembled with small rectangular plates of glass and geometric typographical elements. Photographed together with the artist's tools including mechanical drawing compass and architectural triangles, ink, pen and pocket watch that complete the multi-dimensional work. In many ways, the sculptural aspects of the modern photomontage in construction speak to Rodchenko's personal development as an artist. Instruments and tools reference work in modern painting, printmaking, architecture, film and his geometric drawings and sculpture. After Rodchenko started using his first camera, *Mena Vsekh* was as much a self-portrait as a study for the book cover of essays by Constructivist poets. The construction redefines portraiture with a assembled subject to be photographed in the studio. Referencing modern advances and innovations from Rodchenko's other artistic productions in a wide variety of media and experiments at the time.

³⁷ Special thanks to art historian Angelica Charistou, Curator of the George Costakis Collection, State Museum of Contemporary Art in Thessaloniki for sharing icon paintings at the Museum of Byzantine Culture during photography research at the Costakis Collection in November 2013. Christian missionary and theologian, Saint Cyril, a Byzantine monk from Thessaloniki invented Glagolitic script in the 9th century, the first alphabet to transcribe Old Church Slavonic, which the Russian language is based.

³⁸ Alexander Lavrentiev, *Владимир Маяковский, ПРО ЕТО, Vladimir Mayakovsky, IT, Wladimir Majakowski, DAS BEWUSSTE THEMA*, Ars Nicolli, Berlin, 1994, 72. Special thanks to Alexander Lavrentiev and the Rodchenko Family for the history and the reprinted trilingual publication.

³⁹ Alexander Lavrentiev, *Alexander Rodchenko, Photography 1924-1954*, English, German, French edition, Knickerbocker Press, 1996, Figure 52, page 57.

Another multimedia portrayal created the same year is “Self-Portrait” by El Lissitzky (Fig. 28). Not a photomontage technically and titled as “The Constructor”, the first combination print is created through the chemical process of photography.⁴⁰ Lissitzky modernized the tradition of combination prints by Rejlander, Robinson, Le Gray and other photographers in the late nineteenth century by exposing more than one negative from the camera on light-sensitive paper to create a single photograph. The basic combination print by Lissitzky is made with two negatives with added photogram elements with the chemical photography process. One negative made by the artist of his face and another with his open hand and fingers holding an architectural drawing compass laid on graph paper. He would also use the photograph of fingers and compass for the cover of *Vkhutemas Architecture* publication for the School printed in 1927 (Fig. 29).



Fig. 27. Alexander Rodchenko, *Mena Vsekh (Change of Everybody)*, three-dimensional modern photomontage for book cover and title by Constructivist poets, gelatin silver photograph of still life with cut photographs, glass, typographical elements, compass, drawing triangles, ink, pen and pocket watch, 1924, A. Rodchenko and V. Stepanova Archive, Moscow.

Lissitzky combined further elements of painting and drawing helping expand modern photography with other mediums. Gouache painting and black ink drawing with the compass on the surface of the gelatin silver photograph are added after the chemical printing process. The mechanical compass creates the partial geometric circle with ink. The eye is centered inside the palm of the hand by arranging the two negatives and exposing them together to create a single photograph. The added typographical fragment in the top left corner is cut from the stationary paper of the only color letterhead designed by the artist (Fig. 29)⁴¹. The original stationary printed in black and red ink, is contact printed as a photogram element. Reversing the black printed letters of “El Lissitzky” from the letterhead, which become reversed into white letters with grey graphic elements from the design. The “el” to the right of the arrow is hand painted in gouache on the

⁴⁰ This unique combination print, made with two negatives, photogram elements and additions of drawing and painting, was discovered during archive research at the Tretyakov Library in Moscow in 1992. Included in the file with a late professional autobiography by the artist written right before he died in December 1941. “Self-Portrait” was subsequently published on the cover of the anthology including an essay by Lissitzky, edited by the author, *Poetics of Space: A Critical Photographic Anthology*, University of New Mexico Press, Albuquerque, 1995. Other photographic versions and variations exist in major museum and private collections internationally.

⁴¹ Sophie Lissitzky-Küppers, *El Lissitzky, Life-Letters-Texts*, Thames and Hudson, London, 1968, 115, 138.

photograph's surface. The semi-transparent letters that end the English alphabet "XYZ" are also exposed by light from a stencil to become reversed as another photogram element with other geometric paper fragments including an arrow. Suggesting that the artist moves in vision beyond language and alphabets with the eye and hand, Lissitzky enlarges his modern lexicon with combinations of modern photography processes, mechanical tools, and mixtures of mediums. The artist rephotographed the "Self-portrait" and printed varieties of positive and negative versions to explore variations and further artistic potentials with various photography processes with examples found in museums and private collections worldwide.

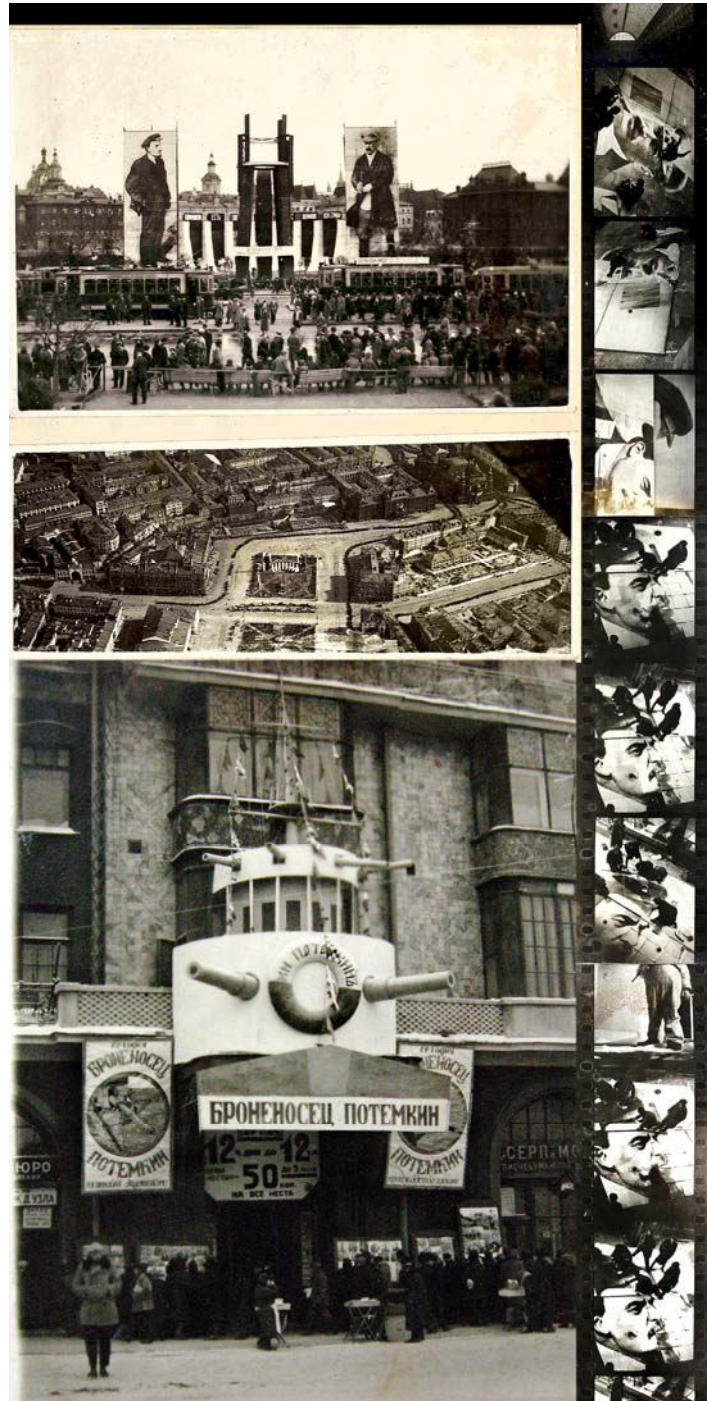


Fig. 30. Gustav Klucis, views of monumental installations and preparations of modern photomontage panels for May Day celebration, Decoration of Sverdlov Square, Moscow, gelatin silver photograph and contact print from 35mm film strip, 1932, Collection of Latvian National Museum of Art, Riga. Lower left: unknown photographer, Opening of Battleship Potemkin film in Moscow with modern photomontages, gelatin silver photograph, 1925, Collection of Sergei Burasovsky, Moscow.

El Lissitzky like Klucis, Rodchenko, Eisenstein, Moholy-Nagy and others throughout the 1920s combined cinema, photography, theatre and other media in two and three-dimensional forms with prolific avant-garde experiments in modern forms of artistic expression (Fig. 30–31). Further applying modern photomontage from the printed page and cinema to architectural designs in large public spaces throughout central and eastern Europe. Their presentations on unprecedented scale set new standards in far-reaching production that included teams of artists, staging, set and theatre design including rooms, walls, and ceilings from exhibitions in museums to public exposition halls. Creating photographic installations that set precedents for many directions in contemporary art into the late twentieth and early twenty-first centuries.



Fig. 31. Lucia Moholy, *Stage Set for Tales of Hoffman* by László Moholy-Nagy, 1929, gelatin silver photograph, Siegfried Giedion Archive, GTA Swiss Federal Institute of Technology, Zürich © Hattula Moholy-Nagy, Ann Arbor, Michigan.



Fig. 33. El Lissitzky, *Film und Foto, the Internationale Ausstellung des Deutschen Werkbunds*, Stuttgart, Russian cinema exhibition, modern photomontage installation with cinematic viewers, 1929.



Fig. 34. El Lissitzky, *Entrance to the International Hygiene Exhibition, Dresden*, modern photomontage installation, 1930, Collection of V.V. Mayakovsky Museum, Moscow.

Lissitzky designed and produced architecturally scaled exhibition installations and redefined publications with modern photomontage throughout Germany in the 1920s (Fig. 32–34). His pavilion constructions and photographic books established new standards and experiences for the viewer. Including the International Press Exhibition, *Pressa* in Köln, *Film und Foto* the Internationale Ausstellung des Deutschen Werkbunds, the first major international photography and cinema exhibition by the German Werkbund in Stuttgart, and the International Hygiene Exhibition in Dresden. The avant-garde defined modern photomontage with a wide variety of media, materials and approaches combined on their own terms. From chemical printed photographs to photomechanical prints with ink on paper made on the printing press beginning in 1918 to the Second World War.

In distinction from all other forms of photomontage, modern photomontage was one of the first transdisciplinary mediums in modern art in function and purpose. While assimilating art disciplines in many forms with changing technologies, it was also a working method of appropriation. Proto modernists often selected, cut and assembled photographs made by others from different media. Most often exploiting found photographic imagery selected and cut from the printed page rather than chemically producing and printing black and white photographs in the dark room. Although both methods were used and combined. Appropriation by the early generation of the avant-garde resurfaced in the late twentieth century with further printing methods and emerging technologies under the rubric of postmodernism.

Originality advanced and defined the modern medium by the intent of the artist. There is no single form of photography, film or process designated in the wide range of variations invented in 1918 where the history of modern photomontage originated. Mass-producing media allowed additions of color, applications of inks on paper, mixtures of media, new forms of cinematic expression, and multiples beyond traditional,

single one-of-a-kind works of art. Modern photomontage was most often made in large numbers and multiples. Sometimes in thousands with the photomechanical printing press including photolithography to letterpress and photo-offset printing.

Contemporary artists advance related photographic ideas today with broadening transdisciplinary approaches and media. Exploring photographic ideas through a new digital revolution in technologies underway. Abandoning over 175 years of chemical forms of photography, film and darkroom processes, while returning to ink on paper, and amplifying film through video as well as electronic forms of imagery. Offering further potentials after the modern era in redefining visual photographic expression for another century.

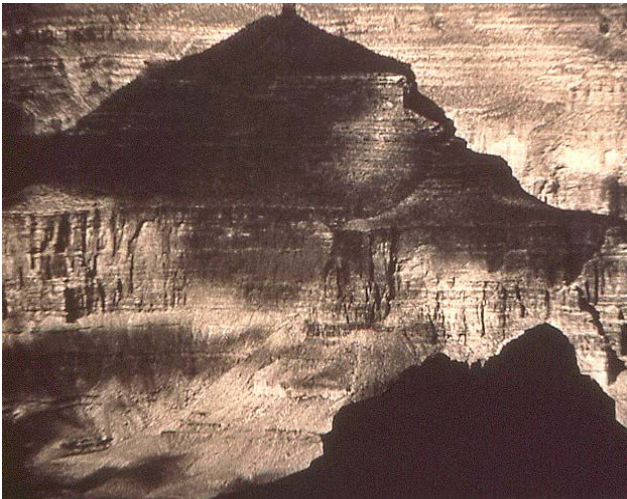


Fig. 1. Alvin Langdon Coburn, *The Great Temple* [Grand Canyon], gum-bichromate and platinum print, 1911, Collection of International Museum of Photography at George Eastman House, Rochester, New York.



Fig. 7. Alvin Langdon Coburn, *Vortograph*, gelatin silver photograph, 1917, Collection of International Museum of Photography at George Eastman House, Rochester.



Fig. 2. Max Weber, *Chinese Restaurant*, oil painting, 1915, Collection of Whitney Museum of American Art, New York, Estate of Max Weber, Santa Fe, New Mexico.

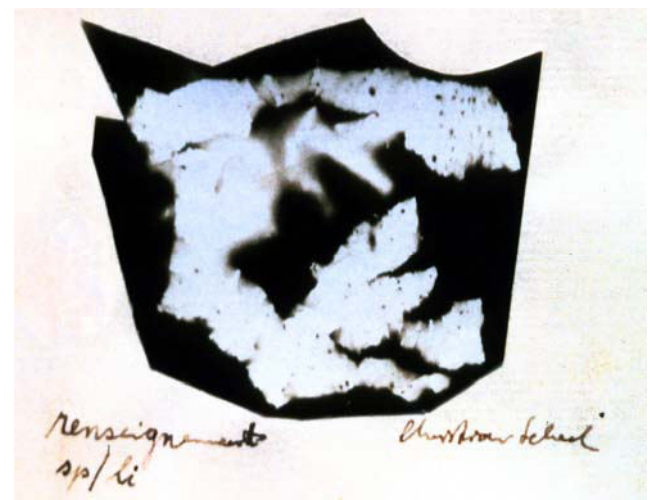


Fig. 6. Christian Schad, *Renseignements*, Schadograph [photogram], 1919, Collection of Quillan Company, Courtesy of Jull Quasha.

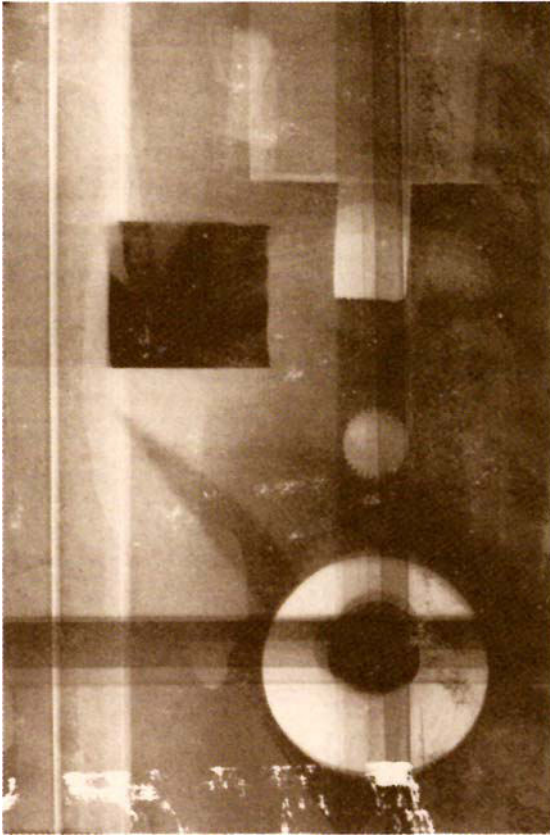


Fig. 8. László Moholy-Nagy, untitled, photogram, silver chloride photograph (daylight printing-out paper), 1922, Collection of National Museum of American History, Washington, D.C. © Hattula Moholy-Nagy, Ann Arbor, Michigan. One of the first photogram experiments.

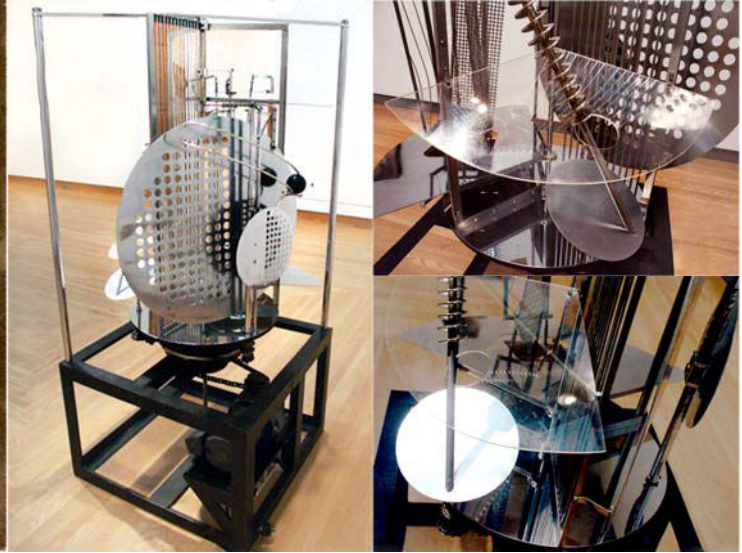


Fig. 9. László Moholy-Nagy, *Light-Space Modulator (The Light Prop)*, kinetic sculpture with electric motor, metal, plastic, wood, 151x70x70cm, three detail views, Collection of the Busch-Reisinger Museum, Harvard University, Cambridge, Massachusetts © Hattula Moholy-Nagy, Ann Arbor, Michigan.

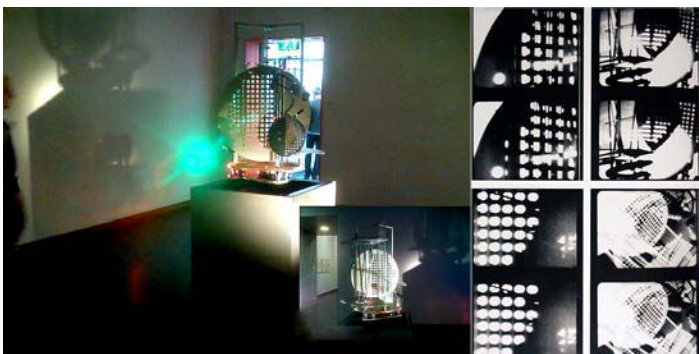


Fig. 10. Installation of contemporary *Light-Space Modulator* in Stedelijk Van Abbemuseum, Eindhoven, photograph by Todd Brandow. Film montage from *Lichtspiel Schwarz-Weiss-Gray (Lightplay Black-White-Gray)*, 1930 © Hattula Moholy-Nagy, Ann Arbor, Michigan.



Fig. 11. László Moholy-Nagy, *Bankruptcy Vultures [self-portrait]*, modern photomontage, 1922-1923, The Vera, Silvia, and Arturo Schwarz Collection of Dada and Surrealist Art, Israel Museum, Jerusalem © Hattula Moholy-Nagy, Ann Arbor, Michigan.



Fig. 14. Gustavs Klucis, *Attack, Latvian Riflemen (Attack. A Strike at the Counter-Revolution)*, Design for a panel at the Fifth All-Russian Congress of Soviets in Moscow, modern photomontage with graphite, ink and gouache, 1918, Collection of Latvian National Museum of Art, Riga.

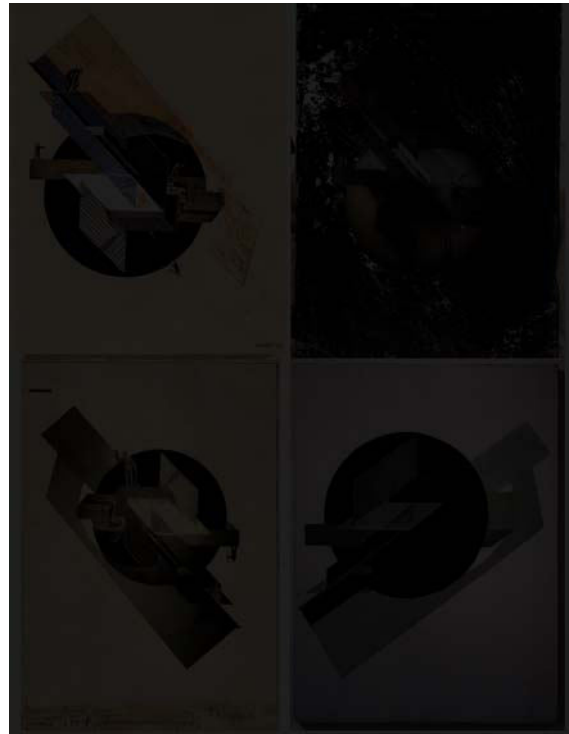


Fig. 15. Gustavs Klucis, *Dynamic City*, top to bottom, left to right: 1) modern photomontage, collage, gouache, pencil and aluminum foil on paper, 1919. Collection of Latvian National Museum of Art, Riga; 2) glass plate negative with ink, 1919–1921, The George Costakis Collection of Russian Avant-Garde Art, State Museum of Contemporary Art, Thessaloniki; 3) gelatin silver photograph and pencil on paper, 1919, Collection of Latvian National Museum of Art, Riga; 4) oil with sand and concrete on wood, 1919–1921, The George Costakis Collection of Russian Avant-Garde Art, State Museum of Contemporary Art, Thessaloniki.



Fig. 16. Gustavs Klucis, Collection of the Latvian National Museum of Art, Riga except where noted (top left to bottom right): 1) photographs of early Cubist drawings and *Red Man*, lithograph, 1918, page from artist's *Red Album*; 2) Valentina Kulagina, *Kunstausstellung der Sowjetunion, Zürich (Art exhibition of the Soviet Union, Zürich)*, modern photomontage, photolithograph, 1930, National Gallery of Australia, Canberra. 3) *More Steel*, modern photomontage with collage of paper and aluminum foil, gouache and Indian ink on paper, 1928, unpublished; 4) *The struggle for fuel and metal (More coal, oil and metal)*, modern photomontage with gouache and pencil on cardboard, 1932; 5) *Self-portrait with Kulagina for Socialist reconstruction* [made in studio], gelatin silver photograph, c1926, San Francisco Museum of Modern Art; 6) *Socialist reconstruction*, design for poster, modern photomontage with gouache, India ink and varnish on paper.



Fig. 18. Hannah Höch, *Schnitt mit dem Küchenmesser Dada durch die letzte Weimarer Bierbauchkulturepoche Deutschlands*, modern photomontage, *Cut with the kitchen knife Dada through the last Weimar beer-belly cultural epoch in Germany*, Collection of Staatliche Museen zu Berlin, Nationalgalerie.



Fig. 19. John Heartfield, *Jedermann sein eigener Fussball: Illustrierte Halbmonatsschrift* (Everyman His own Football: Illustrated semi-monthly), cover, modern photomontage, Malik Verlag, Berlin, 1919.



Fig. 20. John Heartfield, George Grosz, editor Raoul Hausmann, *Der Dada 3*, cover and page 2, modern photomontages, 1920, Collection of Institut Valencià d'Art Modern, IVAM, Centre Julio Gonzalez, Valencia, Spain.

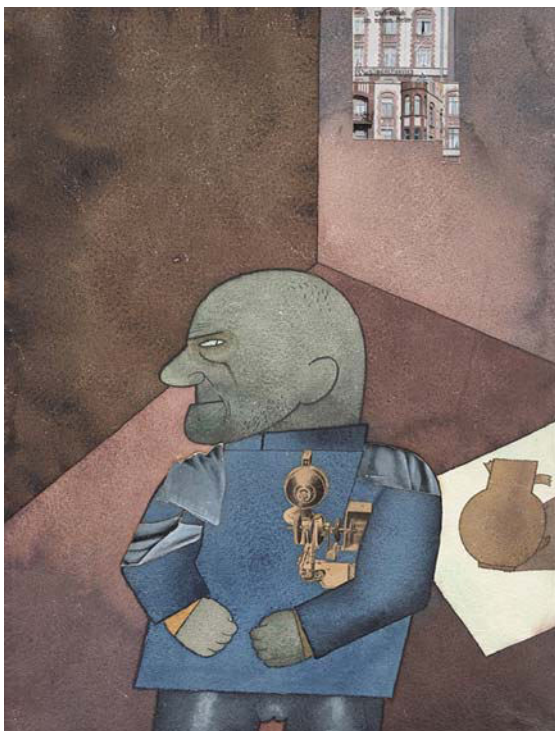


Fig. 21. George Grosz, *"The Convict": Monteur John Heartfield after Franz Jung's Attempt to Get Him Up on His Feet ("Der Sträfling": Monteur John Heartfield nach Franz Jungs Versuch, ihn auf die Beine zu stellen)*, modern photomontage with watercolor, ink, pencil and photomechanical papers, Collection of The Museum of Modern Art, New York © 2017 Estate of George Grosz.



Fig. 23. Varvara Stepanova, *Construction*, modern photomontage with cut printed papers, 1919, The George Costakis Collection of Russian Avant-Garde Art, State Museum of Contemporary Art, Thessaloniki; Aleksandr Rodchenko, untitled, modern photomontage with cut papers and pencil on paper, Collection of The Pushkin State Museum of Fine Arts, Department of Private Collections, Moscow.



Fig. 24. Aleksandr Rodchenko, GUM (Государственный универсальный магазин, State universal store), modern photomontage, photolithograph, 1923, Collection of State Museum of V.V. Mayakovsky, Moscow; Aleksandr Rodchenko, *Kino Glaz 6 series*, worker Dziga Vertov, operator Kaufman, modern photomontage, photolithograph, 1924. Private Collection.



Fig. 25. Scenes of the life of Joseph from the Old Testament. From the four icons series, 1677–1682, oil on wood panel, Collection of Museum of Byzantine Culture, Thessaloniki, Greece.

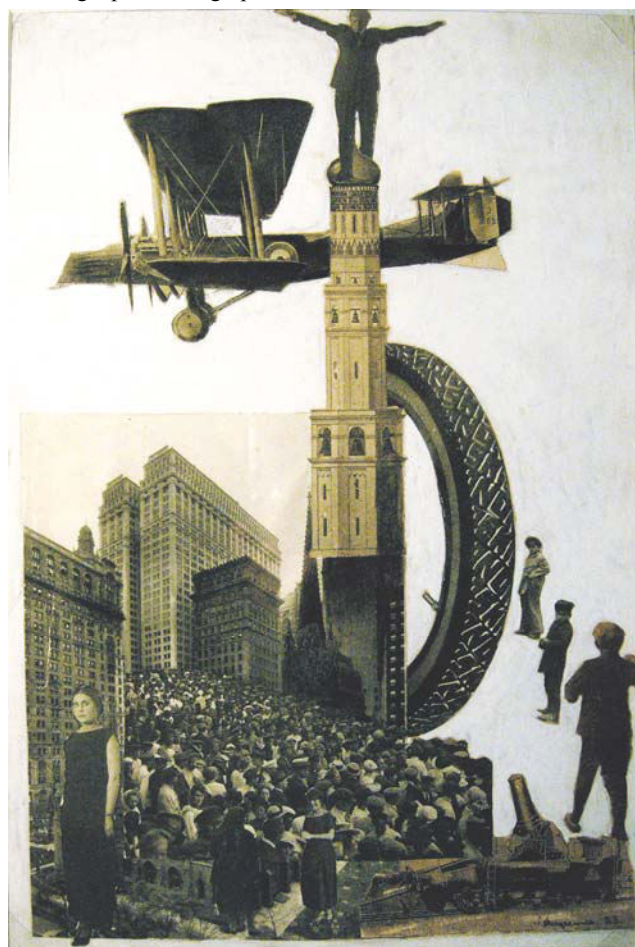


Fig. 26. Alexander Rodchenko, *I catch my balance*, modern photomontage with watercolor, illustration for *Pro Eto* by Vladimir Mayakovsky, 1923, Collection of the State Museum of V.V. Mayakovsky, Moscow.

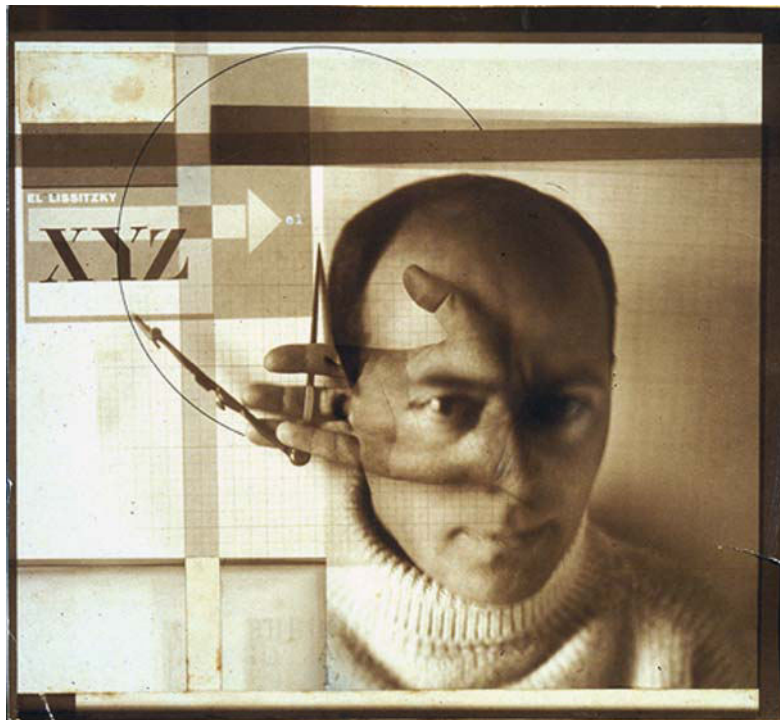


Fig. 28. El Lissitzky, *Self-Portrait (The Constructor)*, gelatin silver photograph with photogram, gouache and ink, 1924, photograph by A. Sergeev, Collection of State Tretyakov Gallery, Moscow.



Fig. 29. El Lissitzky, *Vkhutemas Architecture*, Moscow, photolithography, 1927, and the artist's color letterhead design, 1927

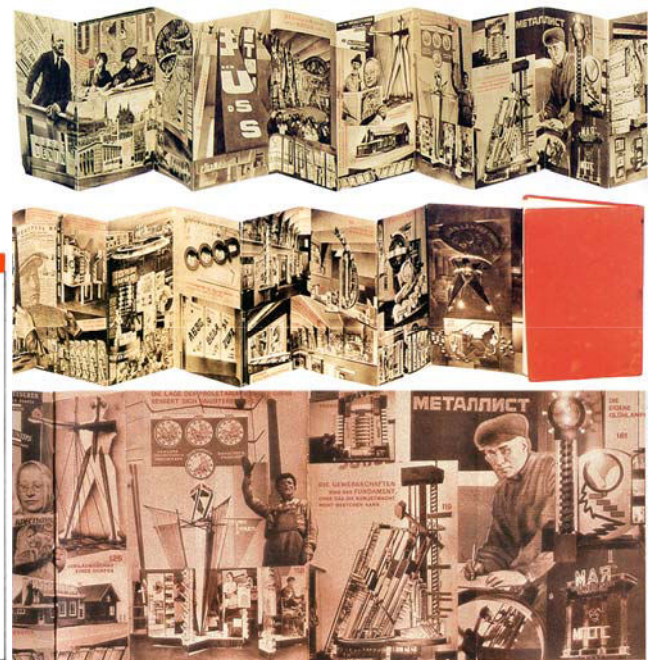


Fig. 32. El Lissitzky, catalog for Pressa, International Press Exhibition, Köln, modern photomontage, photolithography, 1928, Collection of National Gallery of Art, Canberra, Australia.